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Original Communications.

A BRIEF SKETCH OF THE METHODS OF REMOVING GROWTHS FROM THE LARYNX WITH THE AID OF THE LARYNGOSCOPE; WITH A CASE, IN WHICH A FIBRO-CELLULAR GROWTH WAS REMOVED FROM THE RIGHT VOCAL CORD.

Read at the Meeting of the Massachusetts Medical Society, June 3d, 1873.

By F. I. KNIGHT, M.D.

WE find, scattered here and there in the medical literature of the hundred years previous to 1859, records of between sixty and seventy cases of laryngeal growths, most of which were discovered after death. In only nine of these cases, was an attempt made to remove the growth during life, "and one of these," as Mackenzie says, "is so vague that it must necessarily be excluded."* In four of the remaining cases, viz., those of Regnoli (of Pisa), Middeldorpf and the two of Horace Green, the growth was removed through the mouth.

Since Czermak's discovery of a practicable method of performing laryngoscopy, in 1858, hundreds of cases of laryngeal growths have been observed and treated. It was the good fortune of Czermak himself to have been the first to observe a laryngeal polypus by the aid of the mirror, and Lewin seems to have been the first to have removed a growth from the larynx by the aid of the same.†

It is evident from the number of cases which have been observed since the discovery of the use of the laryngoscope, that growths occur in the larynx not infrequently, and it will naturally be asked why more were not found formerly on post-mortem examination?

Some observers still feel it hard to answer this question, while others say that in most cases the larynx was not opened at all, and in the few cases in which it was opened, small growths might easily have been overlooked; and I have recently had a case, which I shall report elsewhere in full, which seems to show that warty growths shrink up very much after death.

Czermak's discovery created an era in the treatment of laryngeal growths, and opened a field for operative procedure, which, if indeed usually requiring much practice and a great degree of patience, is full of brilliant results.

* Growths in the Larynx, p. 3.
† On July 20th, 1860. Deutsche Klinik, 1862.

It is my intention, in the limited time allowed me, to briefly bring to the notice of the society a few of the instruments and methods of operating, which I consider to be among the best of those which I saw employed last year when visiting the various laryngoscopic clinics of Europe.

I will simply state beforehand, without stopping to argue the points involved, my opinion that *no operation should be attempted on growths known to be malignant, and that thyrotomy should never be performed until it is decided that all other methods of operating are impossible.**

Fortunately for us, however, a non-malignant growth seldom occurs in the larynx, which cannot be removed through the mouth by the aid of the laryngoscope. In young children, however, it will sometimes be found impossible to remove the growths in this manner; and in these cases I agree with Dr. Oliver, of this city, in thinking it better treatment, instead of performing thyrotomy, to introduce a tracheotomy tube, when the dyspnœa becomes dangerous, and then to wait till the child becomes old enough to submit to an intra-laryngeal operation, or until the growth disappears, which Dr. Oliver is convinced, from experience, may happen, when the growth is a simple, soft, papillary one. Mr. T. Holmes, in a communication in the *British Medical Journal* of May 10th, 1873, also speaks, with reference to such cases, in favor of performing tracheotomy, and waiting till the child is old enough to allow the growth to be removed through the mouth.

Again, if a growth is small and so situated as to produce no inconvenience, and if, after examination at repeated intervals of time, it is found not to be increasing in size, it may, as Mackenzie suggests, be left alone. This would be particularly desirable, if Gibb is correct in his opinion that the "pecking away" system is, in some constitutions, most liable to generate malignant disease from the irritation it sets up.†

The question will naturally be asked, how much can be accomplished by inhalations or by solutions applied by means of a brush or sponge, towards the removal of laryngeal growths. From inhalations, little or nothing can be expected in the treatment of primary neoplasms, the striking effects, which have been reported from their use, occurring usually in syphilitic, typhus and other secondary excrescences, which show a strong tendency to, and often do disappear of themselves.‡

A few growths have been reported to have disappeared under the use of caustic and escharotic solutions applied by means of the

* Those who wish to investigate the merits of thyrotomy, for the removal of laryngeal growths, are referred to a very able and exhaustive paper, likely to do much for the cause of conservative surgery, by Morell Mackenzie, in the *British Medical Journal*, April 26th and May 3d, 1873, in which there is a description of the results of this operation, in forty-eight cases collected by himself; 1. In relation to life. 2. In relation to respiration. 3. In relation to voice. 4. In relation to recurrence.

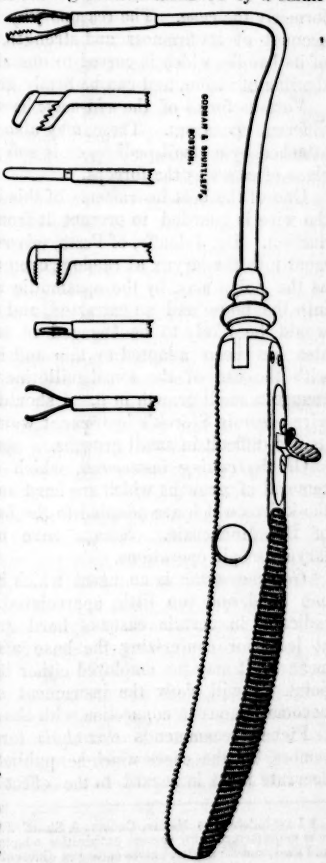
† The Laryngoscope in Diseases of the Throat, &c. Gibb, 3d edition. London. 1868.

‡ See cases of Siegle, Inhalationen, III. Auflage. Stuttgart, 1869, p. 172; and Fieber, Die Inhalation. Wien, 1865, p. 117.

brush or sponge, but I suspect the number of genuine neoplasms, which have so disappeared, to be very few. Those acquainted with the use of instruments for the removal of laryngeal growths, as a rule, only use caustics and escharotics as applications to the seat of a growth, the most of which has been already removed.

Of instruments employed for the removal of laryngeal growths, it was natural that the forceps should have been one of the first, and it continues to be, in one form or another, the favorite instrument. It is adapted to those cases in which the growth is attached by a small pedicle, or in which, if the attachment is large, the growth is soft enough to be broken away by pieces, or to be removed by pieces, after they have been partially cut off by the knife.

Many varieties of this instrument have, of course, been invented. Those which were formerly made and sold as laryngeal forceps, for removing foreign bodies from the valleculæ at the base of the tongue and from the hyoid fossæ, were much too short to be used to advantage within the interior of the larynx. The general form and curve which I prefer for laryngeal instruments is seen in this sound. Mackenzie, in his modification of the common steel forceps, has transformed the curve into nearly a right angle, thereby trying to avoid unnecessary irritation of the epiglottis. I think, however, that as a rule one operates better with this instrument resting firmly and steadily on the epiglottis, than by trying to avoid it; in which case he is pretty likely to touch it just enough to be very irritating. This instrument of Mackenzie, one of Fauvel, which is armed with teeth for seizing the growth, and with a catch upon the handles to pre-



Shroetter-Turek tube forceps.

vent their being opened when once they have closed, and the Cusco forceps are the principal modifications of the *common steel forceps.* One or more of the blades may also be made with a cutting edge.

Excellent *tube-forceps* have been invented by Mackenzie, Bruns and others, but the instrument of this kind, which I prefer, is the Schrœtter-Türck forceps, which I have had so modified by Messrs. Codman & Shurtleff that the forceps is closed by the tube being pushed over it, as is done in Mackenzie's and Bruns' instruments, instead of by a withdrawal of the forceps within the tube, as was formerly the case. The reasons why I prefer this instrument are, on account of its firmness and strength, and on account of the shape of its handle, which is curved to one side, and entirely removed from the line of vision, and can be firmly grasped in the whole hand.*

Various forms of the *wire-noose* have been proposed, and used by different operators. These may also be used where the growth is attached by a small pedicle, or is soft; in a word, in about the same class of cases as the forceps.

One of the best instruments of this kind is that of Störck, in which the wire is guarded to prevent it from being bent during its introduction. Dr. Jelenffy, of Pesth, advocates the forcing of this instrument into the larynx at random, even on the first visit of the patient, as the polyp may, by the spasmodic action of the larynx, be forced into the noose and so extracted, and as nothing else in the larynx would be likely to be engaged in it. A regular guillotine blade also has been adapted to this and instruments, but those familiar with the use of the tonsil-guillotine will know how hard it is to engage a small growth in it. I should think that the guard over the wire-noose in Störck's instrument would, for the same reason, render its use difficult in small growths.

Of the *cutting instruments*, which are necessary to aid in the removal of growths which are hard and have a broad base, I prefer the knives which are adapted to the handle of Türck, and the lancet of Dr. Mackenzie. *Scissors* have been generally abandoned in laryngoscopic operations.

Galvano-caustic is an agent which has been over-estimated on the one hand, and too little appreciated on the other. Its use seems indicated in certain cases of hard growth with broad attachments, at least for cauterizing the base after partial removal by other means. It may be employed either by means of a loop or a simple point. I will show the instrument of Voltolini, whose name has become famous in connection with the use of galvano-caustic.

Fieber recommends *electrolysis* for the treatment of laryngeal tumors, but the cases which he publishes do not afford us any very accurate ideas in regard to the effect of this agent, inasmuch as he

* I am indebted to Messrs. Codman & Shurtleff for a cut of this instrument which they now manufacture, with various extremities adapted to it, viz., forceps of various shapes and sizes, caustic holder, knives cutting in different directions, &c.

leaves us in ignorance as to the nature of the *swellings* which he states to have been successfully treated by it.

It may be easily conceived that the preparatory training, which is necessary to enable the patient to bear any of these instruments, may be very long or very short, but it usually requires considerable time to be able to operate with precision, leaving nothing to chance.

Also, after the patient is trained, the operation may be accomplished at once, or it may require many sittings, the growth being removed little by little.

If it is necessary at any time to expedite matters, I should not hesitate to use *local anæsthesia*, as practised at Schrœtter's clinic in Vienna, in case the patient was in good general condition, and neither very young nor very old. This consists in the local application of chloroform and morphia to the larynx in the following manner; twelve to eighteen hours before the operation pure chloroform is applied by means of a brush every five minutes for an hour; and then every five minutes for another hour a solution of acetate of morphia (grs. vi.— ʒ j.); the patient being reminded not to swallow, and to gargle frequently with the following:—

℞ Acidi tannici,
Alcohol, āā ʒ i.;
Aquæ, ʒ vi; ft. sol.

If, at the end of twelve hours, the larynx is still very sensitive, twelve more applications of the solution of morphia are to be made, as before, and so on until anæsthesia is produced. I have not had occasion to use this method here, but have seen it used in Vienna, and have myself had there the opportunity to test the sensibility of the larynx before and after its use, and there was undoubtedly very great diminution, and in one case almost total abolition of it.

I will relate to the society one case which occurred in my private practice, in which a polyp was removed from the anterior part of the right vocal cord with the aid of the laryngoscope, with the complete restoration of the voice to its normal character. A. J. B., aged forty-four, captain of a whaling ship, consulted me Dec. 12th, 1872, with reference to his voice. He had no hereditary tendency to any particular form of disease and had never had syphilis. He enjoyed robust health—with the exception of a fever when twenty-one years of age, in Brazil, with which he was very sick but from which he fully recovered—until Sept., 1871, when he had a cold in the head, followed by cough. In about ten days, there was a marked alteration in the character of the voice, which was not very rough but high in pitch. He got rid of the cold and cough in about a fortnight, his voice improved and got nearly well, but, about the first of November, he took another cold from sleeping in a damp bed and his voice grew worse constantly, till in the spring of the present year he could speak only in a whisper for three months. In August, "after taking cider vinegar, for a week," he spoke out loud,

and continued after that to speak in a peculiar, very high pitched voice (which became somewhat stronger), until the time of his visit to me. During the year in which he had suffered, he had undergone a variety of treatment, such as might be expected, before the nature of the trouble had been ascertained, which, of course, could only have been done by the aid of the laryngoscope. At the time of his first visit to me, his voice was very high pitched, squeaky, and produced with much effort, entirely unfitting him for his duties as commander of a whaler. He stated that he had had some dyspnœa for four or five years, since a shipwreck, at which time he was in the water for two hours. This, he thought, had increased a little since the present trouble. He had no cough and felt generally well. Examination of the chest showed nothing abnormal. On examination with the laryngoscope, a neoplasm, apparently about the size of a bean, was seen projecting from the upper surface and edge of the anterior part of the right vocal cord. This was grayish in color and appeared rough on its surface, more like a simple epithelial growth than anything harder.

Fibro-cellular polyp on right vocal cord. Appearance in the laryngeal mirror, during respiration.

Appearance during phonation.

Appearance during respiration, after removal of the polyp—slight cicatrix on right cord.

During ordinary respiration, the anterior part of its attachment to the cord was concealed by the epiglottis. During phonation, the neoplasm was pushed hard against the opposite cord, which showed an indentation from this pressure.

These three water colors, executed from life, by Dr. Quincy,* show the images of the larynx as seen in the laryngoscope during respiration and phonation, with the polyp; and during respiration, after it had been removed. I have, also, some large diagrams made by Dr. Quincy, which will show at a glance, to all in the room, these different conditions.

The inconveniences which I experienced in the way of operating in this case were, that the larynx was small, and the growth situated far forward. The patient had been exercised with the mirror and sound nearly four weeks, before I succeeded in seizing the growth with the tube forceps and in removing a piece of it. It was now evident

* The wood cuts are from the original water colors of Dr. Quincy.

that the growth was of a much firmer consistence than I had supposed, and that it could not be removed at once, as soon as I could seize it, as I had hoped, but must be removed in pieces; for, seizing the whole of it in the forceps, and exercising all the force that I dared to, it could not be detached entire from the cord.

The larynx was quite intolerant of most other instruments besides the tube forceps, and the complete removal of the growth in pieces was chiefly effected by means of this instrument, aided by one or two incisions from Mackenzie's laryngeal lancet, and the crushing forceps which I had made for the case. I saw the patient nearly every day, but often could not work upon the growth on account of irritability of the throat, increased at times by bronchitis, until the last four days, when it became quite tolerant of the instruments. The operations were concluded during the first week in March, and after the inflammation, due to the operation, had subsided, the voice was restored to its normal character.

The picture by Dr. Quincy, made after the operations had been completed, shows how completely the removal was effected, only a little cicatrix being visible in the position which had been occupied by the growth.

I did not use *galvano-caustic* in this case, because I had not had much experience with it, and the larynx being small and the growth being situated so far forward, I was afraid of impairing the sound tissue.

Dr. J. C. Warren made the following report on a piece of the growth which I gave him for microscopic examination. "The growth consisted of young connective-tissue cells, which were quite numerous, and were supported in a delicate fibrous intercellular substance. The surface, which on section showed a somewhat irregular outline, was covered with a thick layer of epithelium."

This case was not one of those which afford a chance for a brilliant operation, as, e.g., a pediculated polyp offers, which can be removed at once, as soon as we can take hold of it; but yet was one of those which tax our patience and our skill to a far greater degree, and the results of the treatment of which are equally satisfactory.

GELSEMINUM (GELSEMIUM) SEMPERVIRENS IN ODONTALGIA.—Dr. J. W. Legg *(Lancet,* May 24, 1873) reports several cases of severe pains in the jaw and side of the face, arising from decayed teeth, which were relieved by the use of this drug. From ten to twenty minims of a tincture—made by macerating for a week an ounce of the root in eight ounces of proof spirit—were given every three hours. The pains usually ceased in the course of forty-eight hours. Dr. L. has not found gelsemium of marked service in lumbago, sciatica, or other pains which we are accustomed to call rheumatic.

Progress in Medicine.

REPORT ON THERAPEUTICS.

By R. T. Edes, M.D. Harv.

[Concluded from p. 285.]

Meat Tea.

Bogoslowsky (*Arch. f. Anat. u. Physiol.* 1872, 347, 428, and *Centralblatt*, 1873, p. 279), has re-examined the theories of Kemmerich in regard to the action of meat tea, which was supposed by him to depend wholly on the potash salts contained therein. Bogoslowsky says that Kemmerich used too large doses, and that the fact that a rabbit can be killed not only by a large amount of beef tea, but by the salts extracted from a similar amount, proves nothing except that both are (in enormous doses) poisonous.

With small doses the difference is a marked one. While, for example, a rabbit was killed by the injection of extract of 700 gm. (1 lb. 10½ oz.) of meat reduced to 30 ccm. (about 1 oz.), the ashes of the same quantity dissolved in 30 ccm. water produced in another rabbit only a transient acceleration of the pulse, and the animal completely recovered. Nine days after, it died in an hour and a half after the ingestion of the corresponding quantity of meat tea.

It was shown that injections of warm water cause an increased rapidity of the pulse, but of meat tea, a much greater and more lasting acceleration. The salts hardly differ from warm water, or, in larger doses, the acceleration may last somewhat longer.

The author was able to produce these phenomena to a slight degree in his own person, but in another individual did not succeed. After larger doses (10, 20, 30 gm.), in the latter case, the pulse fell while the thermometer was unchanged. After 40 gm., gastric symptoms appeared and the pulse rose. He concludes, as a practical result, that extract of meat is not so innocent a dietetic substance as is generally supposed, but always calls for care in its administration. (If Liebig's or any similar extract is here referred to, it would seem that the danger is not great unless the quantity used considerably exceeds that mentioned in the directions accompanying the packages.)

In endeavoring to determine to what ingredient meat tea owed the excess of its action over that obtained from the salts, Bogoslowsky found that kreatinin, which exists in extract of beef in considerable quantities, when injected either into the jugular vein, under the skin, or into the stomach, produced a slight acceleration of the heart's beat, but he could not get any fatal effect.

From all which, it appears that the stimulant action of ordinary doses of beef tea is due partly to the warm water, the salts and the kreatinin. It would seem, however, from the observations last quoted, that the presence of kreatinin is not sufficient to account for the difference between the action in beef tea and the salts obtained therefrom. It is only in exceedingly large doses that the salts alone are sufficient to account for a fatal effect by their depressing action upon the heart.

Leube (*Berliner klin. Wochenschrift*, 1873, Nos. 17 and 19, and *Cen-*

tralblatt, 1873, p. 491) has made use of the following method of preparing a solution of meat, to replace the complicated and costly process of Meissner with natural pepsin, which is besides objectionable on account of the disagreeable taste and smell of the product. 1000 grammes of lean beef is placed in a porcelain pot, with 1000 cubic centimetres of water, and 20 cubic centimetres of pure hydrochloric acid. The mixture is heated in a Papin's digester for 10 or 15 hours, and occasionally stirred. The mass is then rubbed down in a mortar to the consistence of an emulsion, and boiled 15 or 20 hours more, without the cover of the digester being lifted. It is then neutralized with carbonate of soda, evaporated to the consistence of a pap, divided into four portions and dispensed in pots.

The muscular fibres are broken up to a fine detritus, and the greater part of the albuminoid constituents is dissolved. The preparation is well borne and willingly taken, but it is better to use some other easily digestible food therewith, in order not to disgust by too constant use. The taste may be improved by the addition of Liebig's extract.

The solutio carnis has been used in acute gastric ulcer and in chronic dyspepsia. It is supposed to give rest to the stomach by sparing it the labor of digestion, the albuminoids being already converted into peptones.

Antagonism of Digitalin and Saponin.

Köhler (*Archiv für experimentelle Pathologie und Pharmakologie*, I., p. 138) has examined experimentally the physiological antagonism between digitalin and saponin, the active principle of saponaria officinalis, or "bouncing bet."

The heart of an animal poisoned with saponin is in the condition of a heart whose afferent nerves, both vagus and sympathetic, have been cut, and which is kept in motion by the musculo-motor centres imbedded in the heart substance itself (so long as their excitability and muscular irritability last).

Some of his more important conclusions, as to the partial antagonism existing between these heart poisons, may be abridged as follows:

A frog's heart, brought to rest by saponin, may be set in motion by digitalin; and a heart, stopped by digitalin, can be set in motion by saponin. Digitalin acts by strong excitation of the musculo-motor ganglia; saponin by depression of the strongly excited restraint mechanism (vagus terminations) in the heart.

When the action of the heart is merely slowed by either agent, the other accelerates it.

Digitalin strengthens the beat of the heart poisoned by saponin.

Digitalin can retard for some time the diminished blood pressure produced by saponin.

It can also retard the great depression of the respiratory centre.

It cannot retard the rapid and deep fall of the temperature.

Since digitalin itself produces, in the later stages of its action, paralysis of the musculo-motor ganglia and unexcitability of the muscle, the antagonism of the two substances is not a complete one, and depends upon the stage of poisoning.

The antagonism is better marked and more lasting with small doses.

Nevertheless, digitalin can delay the fatal ending of saponin poisoning.

Digitalin cannot be considered the antidote of saponin in the toxicological sense.

Whether, however, it might not be of use in poisoning by delaying a fatal termination and allowing time for elimination, further researches must determine.

(This paper possesses much more interest as a contribution to our knowledge of the modus operandi of the action of digitalis than it does from the "practical" conclusions which the author tries to draw. Saponaria cannot frequently give rise to poisoning, although some French authorities state it to have done so. The dried root is said to contain 34 per cent. of saponin, and "two to four pints of the decoction daily are recommended in lues." The inspissated juice is given in the dose of half an ounce per diem.)

Phosphorus.

M. Gubler, in a paper on this drug published in *Bulletin Générale de Thérapeutique* and abridged in *The Practitioner* of July, 1873, p. 46, states that phosphorus is a diffusible stimulant of great energy and of dangerous activity. It should not be used in any affection characterized by nervous, circulatory, or trophic excitement; but in disease unaccompanied by inflammation, fever and nervous excitation, and especially in such cases as are characterized by depression of the circulation, either local or general, diminished power of generating heat, exhaustion, or local asthenia, with paralysis of sensation and movement.

It is of service in those forms of paraplegia not dependant on organic lesion, as well as in cases of cerebral disease in which all irritation has ceased. M. Gubler rather doubts the efficacy attributed to it in the various forms of sclerosis of the nervous centres. Phosphorus is an active agent which may momentarily re-illumine the fading spark, and revivify the languishing powers of life; but as it brings no energy with it, it impoverishes rather than enriches, and can do little for a nervous system exhausted by a chronic affection.

As regards the modes of administration, M. Gubler says that amorphous phosphorus is perhaps the best mode of prescribing it, as this possesses no exciting or irritating action. Solutions are usually preferable to pills. The ethereal tincture, the solution in chloroform, and the solution in oil, are spoken of.

Dr. Thompson (*Practitioner*, July, 1873, p. 13) has derived much benefit from the use of phosphorus in neuralgia. He considers the proper dose to range from one-twentieth to one-quarter of a grain. He begins with one-twelfth every four hours, as the average dose which is safe and efficacious. The treatment may, however, be begun with one-eighteenth, increased to one-twelfth after six doses.

The great obstacles to its use are the ease with which its preparations decompose and the extreme nauseousness of the fluid preparations. Dr. Thompson says that if a solution of phosphorus in superheated oil is used and enclosed in capsules, they afford an agreeable and perhaps sufficiently efficient means of administration; but he thinks that much diluted solutions are the most advantageous.

He has used two forms:—

Phosphorized oil,	℥iii.;
Pounded gum arabic,	℥vi.;
Spirits of peppermint,	℥ss.;
Water to,	℥vi.

Active, but extremely nasty.

Tincture of phosphorus,	{ Phosphorus, gr. 1. / Alcohol, ʒiii. }	ʒiii.;
Rectified spirit,		ʒii.;
Spirits of peppermint,		ʒss.;
Water to,		ʒv.

Active, efficient and convenient, not quite disgusting, unstable.

Dr. Anstie (*Practitioner*, Aug. 1873, p. 103) relates the case of a patient with neuralgia, who took one-thirtieth of a grain of phosphorus twice daily for seven or eight days, near the end of which time he suffered from a constant burning pain at the epigastrium, and his urine became albuminous and bloody. Hence it appears that there are persons who manifest a peculiar susceptibility to the poisonous action of phosphorus. In the present instance, the phosphorus seems to have exerted a beneficial influence on the neuralgia.

Saline Cathartics.

Dr. Adolph W. Miller (*Amer. Jour. Pharmacy*, July, 1873) considers the effervescing solution of tartrate of sodium an improvement on the popular citrate of magnesia, as being more agreeable to the taste, more reliable and efficient in its action as a purgative, with less tendency to tenesmus; its forming a more permanent solution; and its cheapness.

Congenital Hydrocele and Hernia.—In a clinical lecture upon a case of this kind, Dr. Willard Parker states (*Med. Record*, May 1, 1873), that for a good many years he had done nothing for these cases of hernia in young children as far as the application of mechanical apparatus is concerned. Formerly he used mechanical appliances, but found them to irritate the child greatly, and to do no good. When the child gets so that it can run alone, then a truss may be adjusted, and in many cases it will produce a radical cure. Very rarely will strangulation occur if no apparatus is employed. If such patients must be treated, the only thing of service before the child is old enough to run alone is adhesive plaster. This can be used very satisfactorily in cases of umbilical hernia, and in such it may be employed as early as desirable. Make a roll of adhesive plaster, a little conical, like the end of the finger, and of sufficient size to fill the opening in the abdominal wall. Return the hernia, place this roll of plaster immediately in the opening, and over this a strip of plaster reaching to the back bone upon either side. With such treatment one almost always succeeds in curing cases of umbilical hernia in children. With regard to the congenital hydrocele, it should be let alone. If it is desirable to do something, a little warm water and salt may be used night and morning. If it does not go away within a reasonable length of time, the scrotum may be pricked with a fine needle. The little holes thus made will give escape to the fluid and give rise to sufficient inflammation to close up the cavity. If this does not answer, a little thread may be passed through the scrotum, which is usually quite sufficient. In the performance of both these operations, great care must be exercised that the intestine is not wounded.

Bibliographical Notices.

The Function of the Eustachian Tube in its Relation to the Renewal and Density of the Air in the Tympanic Cavity, and to the Concavity of the Membrana Tympani. By Thos. F. Rumbold, M.D., of St. Louis.

This work of forty pages is a study of several cases of so-called patency of the Eustachian tube, in which autophony, or the resonance of one's own voice in the affected ear, was a prominent symptom. From this study, the author is led to conclusions that are in direct opposition to the opinions entertained by otologists of the present day on the following subjects: viz., 1st. The method of supplying air to the tympanum; 2nd. The density of the air within this cavity; 3rd. The cause of the uniform concavity of the membrana tympani.

These conclusions are expressed in the following six propositions:—

1st. That during the act of deglutition the Eustachian tube is not an open passage into the tympanum.

2nd. That the walls of the Eustachian tube are constantly in slight contact.

3rd. That the air continually permeates the Eustachian tube into the tympanum, thus maintaining the normal air density in this cavity.

4th. That the air in the normal tympanic cavity is not of equal density with that of the surrounding atmosphere, the air in the tympanum being rarefied.

5th. That one of the functions of the Eustachian tube is the maintenance of this normal air density.

6th. That the rarefied condition of the air in the tympanum is the cause of the uniform concavity of the membrana tympani, especially that portion of it from which "the light spot" is reflected.

The five cases which form the text of the author are of interest only in so far as they show various conditions which produce the one symptom, autophony, but the discussion of these cases, from which the above deductions are drawn, is so rambling and imperfect, and the author's knowledge of the more recent literature on the anatomy and physiology is apparently so slight that the book is of but little value. When an author attacks some of the fundamental principles of physiology, we have a right to expect, at least, a discussion of the literature of the subject; but we look in vain here for any mention of Rüdinger's histological studies, or those of other German writers.

After a careful reading of the book, we must say that the opening propositions are not proved and our physiology, at least in the points here touched upon, although it may need additions, does not yet need revisions.

Neuralgia and kindred Diseases of the Nervous System: their Nature, Causes, and Treatment. Also a series of cases, preceded by an analytical Exposition of them; exemplifying the Principles and Practice of Neuro-Dynamic Medicine. By John Chapman, M.D., M.R.C.P., M.R.C.S. London: J. & A. Churchill. 1873. Pp. xxiv.—512.

Dr. Chapman has been known for many years as an advocate of the application of bags of ice or hot water to the back, as a means of varying the circulation in distant parts of the system and as a means

of treatment in many diseases. The work whose title is given above professes to be an explanation of this peculiar system of practice when applied to the treatment of neuralgia. It is, however, more than this. It is a very able and complete description of the complaint. Few authors have given so satisfactory a description of the symptoms and complications attending the disease or condition known as neuralgia. Anstie's work on the same subject is complete and accurate, but not more so than Chapman's. The chapter devoted to treatment is also exhaustive in the consideration of those methods which have been generally employed.

In two respects the present work differs from others. The views advocated by Dr. Chapman in regard to the pathology of neuralgia are the exact reverse of those held by Anstie. The treatment most highly recommended is that peculiar to himself, the so-called *neuro-dynamic*.

We cannot explain at length the grounds on which the author founds his belief that neuralgia and, in general, pain is due to hyperæmia of the cord or the nerve roots. His reasons are scattered throughout the book in detached sentences, and in no one part carefully collected into a consecutive argument. Facts of little importance in argument, which might even be used on the opposite side, are usually referred to as supporting the author's views, and this with such an assurance of their applicability, that one is led to suppose that the connection ought to be clear and that the obscurity is due to one's own stupidity.

The following passage expresses briefly the author's view and endeavor. "The proposition that there is hyperæmia of the affected nerve-centre in all cases in which pain is felt is, in my opinion, susceptible of decisive proof; for, as I shall hereafter show, by exerting a sedative influence over the spinal centre of a painful nerve, the pain may be abolished; whereas, by exerting a stimulant influence over the spinal centre of a nerve prone to neuralgia, but not actually painful at the time when the stimulus is applied, the pain may be reproduced."

His reasoning seems to be:—excessive sensation, or pain, implies increased function, that is increased action and increased vitality, therefore increased nutrition. This nutrition is not necessarily peripheral, and the activity is not, but is to be found at the "cell-roots" of the nerves supplying the parts. Still, examples of peripheral excess of nutrition are given in the course of the argument, as the heat, redness and swelling of inflammation in a limb, changes in the eye, in the skin as in herpes, erythema, pemphigus. The increased nutrition implies increase of blood or hyperæmia; this is caused by excessive action of "positive motor nerves." Cold, locally applied, causes contraction of bloodvessels. Cold to the back relieves neuralgia, therefore it is a proof that there was hyperæmia of the cell-roots.

Hyperæmia of "cell-roots" is the cause of pain because pain is relieved by cold. Cold causes contraction of bloodvessels at those roots, because it relieves pain and pain is caused by their hyperæmia. Such seems to be his course of reasoning.

When pain exists, he concludes that there is hyperæmia of the "cell-roots." No satisfactory proof of this is given. Some examples which he quotes, rather incline one to doubt this hypothesis. He

also argues that, as cold contracts bloodvessels when applied locally near them, it produces contraction of the vessels of the "cell-roots" when applied to the back. This is by no means a necessary result. That cold, even when long applied, can have such an action on the vessels of the cord, needs more proof than is given. When it is considered that the skin, a thick layer of adipose tissue (a poor conductor), muscle and bone separate the vertebral canal from the ice bag, it requires more than mere assertion to prove that such an effect would be produced; especially when we consider that the conservative powers of the system, to resist injurious impressions upon vital organs, may cause the intervening tissues to receive such an amount of blood as to neutralize the cold. That the sympathetic ganglia should be thus affected, is still less probable.

The positive part of his argument is wanting in the fact that his premises are not proved; and of two conclusions, neither of which is satisfactorily proved, he uses at one time one to prove the other, and again the second to prove the first.

In the negative part of the argument, wherein he discusses Anstie's theory, he is more fortuuate, not perhaps because he reasons well, but because Anstie reasons poorly. We are glad to see that the case with autopsy, quoted from Romberg by Anstie in support of his views in which he has made such a serious mistake as to entirely reverse what Romberg said, is properly quoted and its little value in support of the atrophic theory of neuralgia is shown by Chapman, especially that, as quoted by Anstie, it is his strongest proof without which his other reasoning has as little foundation as Chapman's; and other reviews have not noticed the discrepancy between Romberg's account and the quotation.

As to the actual value of the ice bag, there can be no question. This is indeed the most important consideration. Many have used it with benefit, and many more would use it if directions were given sufficiently precise to take away an involuntary fear of doing harm by injudicious application. One would suppose that there was no danger attending the use of ice, judging from Dr. Chapman. In only one or two places does he allude to harm resulting from its use, and in those only incidentally. No careful direction is given as to how to use the ice bag, how long, at what times it should be applied, the contra-indications to its use, the accidents or inconveniences resulting from its use. Only by reading his one hundred cases can some of these particulars be learned.

Of the hundred cases, only one, No. 43, is recorded where relief or entire cure was not obtained. In that, the treatment was only imperfectly carried out and was soon abandoned. The fact that unsuccessful cases are not mentioned, and that loose general expressions are used—"in hundreds of cases I have proved by experiment that this is caused," etc., "my writings teem with facts proving the truth of the assertion," —detract from the credibility of the book. It is to be regretted that there are these blemishes, for the method is worthy of trial, not only ice bags, but hot water bags being included, though the ice bag is more frequently employed and mentioned.

Another blemish is the use at times of a style of expression and words and phrases which are not easily understood except after careful study of preceding pages; this is perhaps unavoidably due to

the propensity the author has for theorizing. To many readers, such passages as the following would convey no clearly understood meaning:—

"It may be stated as a rule that the angles of reflection of sensory impressions are generally very acute, though the exceptions to this rule are numerous. Now, when impressions are reflected at angles having the maximum degree of acuteness, they pinge, of course, either on, or extremely close to the points where those impressions were primarily received; and in the case of centric disorder of sensory nerve-centres without an eccentric cause, but with pain referred to any part of the periphery, the disorder being extended to immediately contiguous motor nerve-centres, will probably be transmitted to the region of the referred pain." S. G. W.

Clinical Electro-Therapeutics, Medical and Surgical. A Hand-Book for Physicians in the Treatment of Nervous and other Diseases. By ALLAN MCLANE HAMILTON, M.D., Physician in charge of the New York State Hospital for Diseases of the Nervous System, &c. D. Appleton & Co. 1873. pp. 184.

Inasmuch as hand-books of electro-therapeutrics have been increasing in number and excellence during the past few years, we looked forward instinctively, on reading the title of the work which lies before us, to finding here something better than what had gone before; more conciseness and accuracy in the statement of facts, evidence of a more scientific and critical examination of conflicting observations and opinions. In this hope we were disappointed.

In some respects, the work is a valuable addition to the general literature of the subject, but it does not possess the peculiar merits of a first-class hand-book, and the author's mode of expressing himself is obscure, careless and often faulty.

The first sixteen pages, the least accurate and explicit of all, are devoted to electro-physics.

He tells us here, for example, that "all the phenomena of *tension** may be studied with the galvanometer," and that, when the galvanometer is connected with the circuit of a battery, "the deflection of the needle indicates the *tension (which is proportional to the number of elements employed)* of the current."

To show the inaccuracy of this statement, we would simply point out that in the medical batteries in common use, which are generally of high resistance, five cells will commonly give nearly the same deflection as fifty, although the tension in the latter case is tenfold greater than in the former.

After some descriptions of instruments, comes a chapter on electro-physiology. Speaking here of the action of electricity upon the organs of special sense, or in his words, "the special organs of sense," he mentions "the organ of taste," saying, "the galvanic current produces upon the tongue twitchings of that organ, a metallic taste and *flashes of light!*"

The off-hand manner in which he speaks of the effects produced, experimentally and clinically, by the galvanization of the sympathetic nerve, is in striking contrast to the critical examination which this much discussed subject receives in the last edition of Ziemsen's work.

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* Italics throughout are ours.

The bulk of the book is devoted to therapeutical considerations, and contains many interesting cases which are well worth reading, but which suffer from the company they keep in the way of general statements.

Attention is invited to the following, which is hard to credit, and still harder to parse:

"*Facial Paralysis.*—This disease, which may be produced by exposure, exudation, or pressure of the seventh cranial nerve in *some bony canal* by the product of inflammation, has its seat usually in the Fallopian canal. A syphilitic tumor in the cerebral substance may also make this pressure."

Further on he says: "By the term *hyperæsthesia*, we mean an exalted state of sensibility *in the nerve itself*, dependent upon *some change between its point of origin and periphery.* It does not *necessarily* depend upon inflammation of the nerve, for the pain of hyperæsthesia *is different* from that of inflammation."

Some of our readers may demur at the following: "It is the opinion of dermatologists, nowadays, I believe, that skin diseases are simply neuroses. * * * * * Numerous experiments substantiate the truth of this assertion, and have proved that nearly all skin diseases are amenable to electricity."

The surgical portion of the book is by far the best, and further revision might have made it excellent, both in matter and form. The reports of cases are numerous and interesting.

The number of American books which have received the criticism "wanting in thoroughness," is already full large enough. We are sorry to have to pass it upon another, and confess to feeling sensitive, in spite of the valuable matter that accompanies them, in sending so many blunders across the water for foreign criticism. J. J. P.

BOOKS AND PAMPHLETS RECEIVED.

A Treatise on Pneumatic Aspiration of Morbid Fluids. By Dr. Georges Dieulafoy. Philadelphia: J. B. Lippincott & Co. 1873.

A System of Midwifery, including the Diseases of Pregnancy and the Puerperal State. By William Leighman, M.D. Glasgow: James Maclehose, publisher to the University. Macmillan & Co.: London & New York. 1873. Pp. 835.

An Account of the Cholera as it appeared at Nashville in the Year 1873. By W. K. Bowling, M.D. Union and American Printing Co. 1873. Pp. 63.

Extrait du Dictionnaire Encyclopédique des Sciences Médicales, publié sous la direction de Dr. A. Dechambre.

Revue des Sciences Médicales en France et à l'Etranger. Recueil Trimestriel, Analytique, Critique et Bibliographique, dirigé par Georges Hayem. Paris. C. Masson, Editeur. 1873. (From Westerman & Co., New York.)

Transactions of the Kentucky State Medical Society, 1873. Pp. 168.

Epidemic or Malignant Cholera. By Alfred Stillé, M.D. Re-printed from the Philadelphia Medical Times. J. B. Lippincott & Co. 1873. Pp. 45.

The American Chemist, a Monthly Journal of Theoretical, Analytical and Technical Chemistry. Philadelphia. August, 1873. (Henry C. Lea.)

Boston Medical and Surgical Journal.

Boston: Thursday, September 25, 1873.

"The Reward of Science" is the title of an article, in the *Medical Times and Gazette*, on the refusal of the Treasury to increase the pay of the scientific staff of the British Museum. The writer deplores the fact that there is no work in life so likely to lead to disappointment and penury as the pursuit of science for its own sake, and that there is no kind of labor so poorly paid as that of scientific men. Indeed, all scientific professions, he thinks, are fast falling behind the commercial and business classes at the present rate of remuneration. Facts go to show in Great Britain, and we think the same would be found to be true in this country, that the medical man of to-day is more poorly paid for his services than he was half a century ago. It is true that the young practitioner at the present time obtains a moderate income much more rapidly than ever before—the contrast with the success of the beginner of former years being quite striking. We doubt, however, if this apparent successful opening of a career is an indication of any unusual prosperity of the profession, which, indeed, might be much more substantially rewarded for its services than it is. It is doubtless difficult to find any remedy for such a state of affairs; but we think that the profession might do much to help and protect itself in this matter, without incurring the reproach of too great greediness for gain; a fault, by the way, which it is hardly likely that the doctors are in danger of being accused of. The great extent to which the system of hospital charities has been carried of late years has given an opportunity for gross abuse of the advantages which the public enjoy in the way of gratuitous advice and treatment; and the *New York Medical Record* has shown to what an extent this has been carried in New York. It may be said that the same is substantially true of all large cities. The proportion of patients well able to pay among those who frequent our numerous hospitals and dispensaries has reached a point that hardly ought to be tolerated even by such a long suffering and benevolent profession as our own. The really poor man is cheated out of the time which should be allotted to him alone, while the younger physicians are cut off from a certain class who should by good rights extend their patronage to him.

The article originally referred to blames, and justly we think, those men who have attained the highest round of the ladder of success, and whose position enables them to refuse everything except the most remunerative practice. The custom of charging exceedingly small fees,

now in vogue with many of our most distinguished medical men, acts injuriously both on the younger practitioners and on that class of people who are well able to command their time and attention. If these men were to double their minimum charges, the result would be that the gross receipts of the profession would be largely increased from the pockets of the rich; and those of moderate or small means would be better taken care of for the same money which they now pay.

THE unfortunate man whose corpse found its way so rapidly into the vats of the Medical School of the University of Pennsylvania, was a well-known, highly respectable, elderly bachelor farmer, of Washington County; a man also of considerable means. His intellect had been somewhat impaired by an injury to the head sustained some years ago. He left home suddenly, and, a few days after, his dead body was found in the Schuylkill and taken to the morgue. In less than forty-eight hours he was within the walls of the University, injected and stowed away in the great receptacles for "material" which is accumulated during the summer season, to meet the demands of the large number of students who frequent Philadelphia in the lecture season. Had it not happened that his watch was discovered in a pawn-broker's shop, his disappearance might have forever remained a mystery. Such scandals as this are, fortunately, at the present day, exceedingly rare, and, with proper deference to the present liberal state of legislation on this subject, ought never to occur.

THE sixth annual meeting of the Canada Medical Association was held in Odd Fellows' Hall, city of St. John, N. B., commencing on the 6th of August. Dr. J. A. Grant, M.P., occupied the chair and delivered the opening address. Dr. Hingston read a paper on the "History of Surgery in America," from the early times down to the present day. Dr. Botsford also read a paper on "Hygiene." About fifty members were present. A lunch was given by the members of the medical profession of St. John, in the hall of the lunatic asylum. It was arranged that the next meeting of the association should take place at Niagara Falls, on the first Wednesday in August, 1874.

THE reports last week, concerning yellow-fever at Shreveport, were of the wildest description, the deaths numbering from thirty to forty daily. It was with difficulty that help could be obtained to work the telegraph, so many of the operators had succumbed to the disease. The fever was said to be spreading in northern Louisiana, and even Memphis had been attacked. Subscriptions, for the relief of the sufferers, are being rapidly sent from various parts of the Union.

OPIUM AND THE ACTUAL CAUTERY IN THE TREATMENT OF CHOLERA. BY C. E. BROWN-SEQUARD, M.D.—I have had considerable experience in the treatment of epidemic or Asiatic cholera. In 1849, in Paris, the number of army physicians being insufficient, some civilians, among whom I was, were called to take charge of the soldiers attacked with cholera, at the *Gros-Caillou* Hospital. In the Mauritius, at Port Louis, in 1854, I had charge of a hospital—besides a very large private practice—during one of the most murderous epidemics of cholera that have existed outside of India. Nearly 6,000 people out of a population of about 45,000, died in five weeks. Of all the means of treatment I have employed (and my trials have been very numerous) none has given by far as favorable results as the use of opium in extremely large doses. I will only mention what occurred at a convent, which seems to have been one of the great *foci* of the disease in the Port-Louis epidemic. No death was observed there, although a large number of Sisters of Charity and of young girls (the convent was a boarding-school) were attacked with either the premonitory symptoms or the confirmed and cyanotic cholera. Thirteen of those patients were seized with the most serious symptoms, and all, however, recovered, many of them, if not all, evidently owing to the treatment. For reasons mentioned hereafter, a great many of my hospital and private patients died, notwithstanding my having used opium in their case as I did at the convent. But here was the difference, and in this lies the important point as regards the use of opium against cholera: In the convent the rules given were strictly followed; they were not elsewhere.

They were, first, to give opium every twenty minutes and in large doses so long as the cholera symptoms existed, without fearing poisoning; secondly, to begin the treatment as early as possible. The Sisters of Charity acted just as I desired, and saved, as I have said, all their patients. The fear of poisoning, and many other reasons, prevented the proper application of the rules elsewhere. The preparation almost always employed was laudanum. If there was no great vomiting, or if the vomiting was checked by Rivière's potion (a carbonate and tartaric acid, taken separately one immediately after the other, disengaging carbonic acid inside of the stomach), the laudanum was given by the mouth. If the vomiting was frequent, the laudanum was injected into the bowels, but with the precaution of having a thorough washing of the large intestine by a previous enema to bring out all the contents of that tube, so that the laudanum was rarely rejected. In bad cases a dose of twenty minims of strong laudanum (Sydenham's) was used every fifteen or twenty minutes until the cholera symptoms had ceased, or *(which never occurred when cholera still showed its existence)* until some slight symptoms of opium-poisoning appeared.

I hardly need to say that this mode of treatment does not succeed when the blood has been considerably altered by the loss of a very large amount of its salts.

Of course these rules are not to be followed in cases of mere cholerine or in the premonitory stages of cholera; but even then opium in much smaller doses is also the best means.

Now that we possess a much better means of obtaining rapid absorption of the principal curative element of opium—morphine—in

subcutaneous injections, it is clear that it is that substance which ought to be used and in that way. I may add that many physicians have already proposed and used subcutaneous injections of morphine against cholera.

Against the lack of urinary secretion in cholera, I have employed with benefit, in some cases, the actual cautery on the loins.

Enormous Accumulation of Extraneous Matter in the Stomach.—The patient in this case was a girl, æt. 4, who died in the Hardwicke Hospital, of uncontrollable purging and vomiting. For nine months she had had a hard tumor in her abdomen, but nothing peculiar had been observed by her mother about her appetite. She never complained of any pain till two days before her death, when she was attacked with sudden colic, which lasted about an hour and recurred twice. The tumor was large and hard, and was freely movable. At the autopsy it was found to be composed of a collection of extraneous matters, such as pieces of cloth, cord, straw, grass, chips of wood, &c., which were all matted together into one large mass occupying the entire cavity of the stomach. A similar aggregation was found near the end of the jejunum. The rest of the intestine was empty and healthy throughout, with the exception of a large ulcer which existed in the duodenum over the head of the pancreas. Dr. Yeo, by whom the specimen was shown at the meeting of the Dublin Pathological Society, considered the case interesting as showing the difficulties attending the diagnosis of the disease called *pica*, when the peculiar aberration had never been observed. The amount and position of the aggregation were also unusual. The ulcer in the duodenum seemed to support the idea that some irritation in the alimentary tract is the usual cause of the disease.—*The Medical Press and Circular*, April 2, 1873.

The following extract is taken, *verbatim et literatim*, from the *Medical Investigator*, of Chicago (homœopathic):—

"In the proving of drugs, certain effects are produced which point unmistakably to the condition of the organism resembling the effects of the moral emotions, which fill a vacuum unsupplied by other schools. And so true is found to be this universal law of like for like, that the mariner steers not his ship more unerringly and with more confidence through the trackless waste of water, guided alone by his compass, than relies the homœopathic practitioner upon *aconite*, *opium* and *pulsatilla*, for the effects of fright; *coffee* for excessive joy; *colocynth* for indignation; *hyoscyamus* for disappointed love; *ignatia* for grief; or *nux* or *chamomilla* for the effects of a fit of passion."

Correspondence.

Poisoning by Arsenical Wall Paper.

Messrs. Editors,—It has been suggested to me that my recent personal experience with arsenical wall paper will be of interest to the profession. I recount the circumstances the more willingly, because an opportunity is thus

afforded me of testifying to the direct practical benefit which is conferred by the publication and distribution of such reports as those of the State Board of Health of Massachusetts.

On arriving with my family at London, England, on Feb. 15th, 1873, we entered into the occupancy of three exceptionally clean and pleasant rooms in a lodging-house situated in the vicinity of Russell Square; in Thackeray's time, this was the most fashionable quarter, and it is now regarded as one of the healthiest districts of that great metropolis of 4,000,000 souls, which, according to our minister, Gen. Schenck, possesses an atmosphere but no climate.

The need of rest after several weeks of sight-seeing and shopping in Paris, together with inclement weather, confined my wife to the house for some days; my child, one year old, was, likewise, seldom taken out of doors. I was at the hospitals as long as daylight lasted. For a week or two, we were comfortable enough, though I noticed with regret that my wife did not regain her lost strength, as I had reason to expect she would.

About the middle of the third week, I was surprised at finding a large felon on the child's thumb, to explain which I was fain to suspect the presence of a broken needle or splinter, in lieu of any definable cause, although neither of these foreign bodies could be detected; the felon, on being lanced, healed rapidly.

During the third week, my wife's strength and appetite began to fail; she woke every morning with a headache; had a few colicky pains, but no characteristic symptoms were evinced. On Wednesday morning of this week, the nurse called my attention to the child's eyes, which were glued together, and reported at the same time that there had been a constant overflow of tears for several days, as well as a loss of appetite and much fretfulness. On examination, scarcely any injection, either of the orbital or palpebral conjunctivæ was discernible, but considerable mucus was found adhering to the eyelashes. The lachrymal ducts appeared to be pervious, so that the excessive discharge must have been due to a hypersecretion (epiploa) and not to obstruction of the natural drainage tubes (stillicidium lachrymarum). The fact of its occurrence in both eyes and its not being attributable to any manifest, local or constitutional cause, awakened my suspicions.

The perusal of Dr. Draper's valuable paper in the second Report of the State Board of Health, shortly after its publication, had rendered me familiar with the symptoms of chronic poisoning by arsenical wall papers. Casting about to discover the *origo mali*, I was guided, by the knowledge thus acquired, to examine the paper covering the walls of our rooms. It was of a pale greenish tint, unglazed, and had the color so loosely attached that whatever came in contact with the wall was covered with a green powder. Any lingering doubts, that I still entertained, of the correctness of my diagnosis were speedily dissipated by a comparison of the paper with the specimens included by Dr. Draper in the report above cited. It coincided exactly with the lightest of the three shades there given. To make conviction more certain and to satisfy the very natural objections of my landlady, however, I requested my friend, Dr. Paine of St. Thomas' Hospital, to analyze the paper; this he very kindly did, and reported the presence of a large amount of arsenic.

It should have been stated that the rooms had been recently re-papered and painted, and that we were the first occupants after the renovations were completed.

We left the next day for the Isle of Wight, where a fresh invigorating atmosphere, charged with nothing more noxious than salt and iodine from decomposing seaweed, soon restored the two invalids to their wonted good health.

At a later period, it transpired that the workmen employed to remove the paper from the walls, were rendered ill by that work, as were those, likewise, who had originally hung it; the nature of their symptoms was not made known to me.

There was nothing very peculiar about the two cases which I have related,

except the remarkable rapidity with which the poisonous inhalations gave rise to manifest symptoms; headaches, loss of appetite, emaciation, general malaise, colic, &c., testifying to the great amount of the poison introduced into the system in less than a month. The possibility of so rapid an absorption must be admitted, when we reflect upon the extremely loose attachment of the color, which would make a resort to the recently demonstrated emanations of arsenuretted hydrogen, in the otherwise pure air of rooms, quite superfluous. That the atmosphere must have been filled with floating particles of the arsenical coloring matters is further shown by their direct irritant action upon the conjunctivæ.

My exemption from being affected was undoubtedly due chiefly to my absence from the rooms during the better part of the day, and perhaps also, in a measure, to my small susceptibility to such impressions. The nurse had also been exempt, except for a slight "weakness of the eyes;" she, however, had not joined us until March 1st, and had, therefore, been exposed for a short time only.

Our escape from serious and, possibly, from life long suffering may, I am convinced, be justly attributed to the publication of Dr. Draper's paper in the Report of the State Board of Health, which, by bringing freshly and vividly to my mind the symptoms of chronic arsenic poisoning, enabled me to make an early diagnosis of the affection, and to confirm this by a comparison of the wall paper with the specimens there given.

That the reports are of inestimable practical utility to the community is made evident by these cases, which may be taken as types of many others.

I am very truly yours, JAMES R. CHADWICK.

123 *Boylston St., Boston*, Aug. 1873.

MESSRS EDITORS,—At the quarterly meeting of the Rhode Island Medical Society, held in Providence, Sept. 17th, the following resolution, introduced by Alexander R. Becker, M.D., of Providence, was, after earnest remarks from several of the leading members, unanimously passed.

"Resolved: That, in view of the disastrous effects occasionally arising from a continued use of powerful remedies without due medical authority, the Rhode Island Medical Society earnestly requests the dispensing apothecaries of the State to positively decline renewing prescriptions containing toxic or narcotic remedies, without fresh authority from the prescribing physician."

The secretary was also directed to forward a copy of the resolution to the State Board of Pharmacy.

Would it not be well for the JOURNAL to press similar action on the other State Societies? If the matter were followed up, we might even get laws enacted to prevent this unauthorized renewal of prescriptions, the evils of which are well known to every practitioner.

I am, gentlemen, very truly yours, ALEXANDER R. BECKER.

Providence, Sept. 18, 1873.

SMALLEST ANGLE OF DISTINCT VISION.

MESSRS. EDITORS,—I see it stated "in the books" that the smallest angle of distinct vision is about one second.

On going out this morning to see if the frost had cut down my squash-vines, I noticed the grass covered with spider-webs. I could easily see a single thread, when the sun shone upon it, at seventy feet distance.

On measuring a thread with the microscope and micrometer, I found it to be $\frac{1}{25,000}$ of an inch in thickness. At seventy feet, this would therefore subtend an angle of less than the hundreth part of a second.

Yours respectfully, "COUNTRY DOCTOR."

Medical Miscellany.

We are glad to learn that it is intended to devote a portion of the immense wealth of the late Duke of Brunswick, towards founding a Faculty of Medicine at Geneva.

Dr. Carl Rudolph Braun, the renowned Professor of obstetrics and gynæcology of the University of Vienna, has been raised to knighthood, with the title of "Fernwald."

The distinguished surgeon Nélaton is dead. It was at one time hoped that he was in a fair way of recovery from his severe illness. On Saturday last, however, a relapse suddenly occurred when he sank rapidly, and died during the night.

Physicians who have received circulars relating to cerebro-spinal fever and school hygiene, are respectfully asked to send replies to the undersigned, on or before October 1st.

George Derby, M.D.
102 *Charles St., Boston.* *Secretary of State Board of Health.*

Cod Liver Oil Bread should contain about seventy-five grammes (five tablespoonfuls) of oil to the pound of bread, and three ounces of milk. Small loaves may be made, weighing 150 grammes and containing only two spoonfuls of oil. They are very white and pleasant to look at, and have so little taste of the oil that both children and adults eat them with ease. Thirty-four of these rolls are delivered every day at the *Enfants Malades* for the use of M. Bouchut's little patients, and the children look out for them with pleasure. They are easily digested and create no repugnance whatever. In private practice, adults make use of them as their ordinary diet.—*Bulletin de Therapeutique.*

A New Use for Old Stockings.—Apropos of impromptu fracture apparatus, we copy the following paragraph now going the rounds of the medical journals. We have often found the stocking a valuable substitute for the roller in bandages. "The broken limb is first bandaged with an ordinary roller; this is well coated with the gum and chalk mixture; a stocking is slipped on over this and similarly coated; another stocking is put on over this; and a fine layer of gum and chalk over all. This, for a case of transverse fracture, with a little starch or plaster of Paris, supplies a very neat and serviceable splint."

Professor Rokitansky. This distinguished ornament of the Vienna Medical School has announced to the Professoren-Collegium that next year he will have attained his seventieth year. According to the regulations, he should then retire from his professorship and be placed on the pension-list. It seems, however, that, seeing the great loss his retiring would inflict upon the Vienna School, of which he may almost be considered the founder, an effort will be made to have his case regarded as an exceptional one, as long as his present good health and teaching power continue.

A Wax Candle in the Bladder of a Female.—This interesting case was observed a short time ago at the Hôtel Dieu, Paris. The patient, on admission, complained of intense pain in the abdomen. The urethra, abnormally dilated, easily admitted the finger into the bladder, when a hard, voluminous body was felt. The woman stated that, on account of great difficulty in making water, she had passed a candle through the urethra and had accidentally let it slip into the bladder. It was readily removed with a pair of pincers. The end of the candle, which had been rounded with a knife, was covered with calcareous matter gathered there during the five weeks the candle had stayed in the bladder. Speedy recovery followed.

THE medical societies are about to resume the meetings suspended during the summer. The first meeting of the "Suffolk District" takes place on Sept. 27th; of the "Sciences," on Sept. 30th; of the "Observation," on Oct. 6th. The "Obstetrical" also resumes shortly. The "Improvement" has continued during the summer as usual. We shall take special pains to keep our readers currently informed of the proceedings of the Boston Societies, and hope that the secretaries of societies throughout New England will favor us with frequent reports.

THE friends of legitimate medicine, everywhere, will be gratified to learn that the homœopaths are not, after all, to hold professorships in the school at Ann Arbor. The legislature of the State of Michigan passed the law requiring the appointment of the "infinitesimals," but the board of regents declined to execute it. The supreme court of the State refused to grant a mandamus requiring the regents to comply with the law, whereupon the latter met and passed, with but one dissenting voice, the following very dignified and sensible resolution: "That we maintain the position heretofore taken, and decline to make the appointments required by law; that we do this in no spirit of factious opposition to the apparent will of the legislature, but because we believe the true and best interests of the university demand it; that we re-affirm the former action of the board expressing a willingness to take official charge of an independent school of homœopathy, and connect it with the university, whenever the means shall be provided for the payment of professors.—*Canadian Medical Times.*

SNOW AND BOGGS, ON GLYCERINE AS A VEHICLE FOR ASTRINGENT MEDICINES.—Dr. Snow *(British Medical Journal*, June 28) points out that the astringent metallic taste which remains in the mouth after the administration of tincture of perchloride of iron, and which is but imperfectly disguised by the syrup or spirit of chloroform usually prescribed for the purpose, may be obviated by the use of a small quantity of glycerine—about half an ounce to an eight-ounce mixture. Dr. Boggs, in commenting on the above *(British Medical Journal*, July 5), says that he has for a long time adopted the plan, with the additional object of counteracting the astringent effect of the perchloride of iron on the bowels. He suggests that glycerine might, with advantage, be substituted for syrup in cases where the latter is prescribed as a vehicle for preparations of iron, cinchona, rhatany, &c., which have a tendency to constipate. He also refers to the superior solvent and keeping properties of glycerine.

MORTALITY IN MASSACHUSETTS.—*Deaths in eighteen Cities and Towns for the week ending September* 13, 1873.

Boston, 148—Charlestown, 18—Worcester, 18—Lowell, 33—Milford, 3—Chelsea, 8—Cambridge, 28—Salem, 12—Lawrence, 11—Springfield, 9—Lynn, 21—Gloucester, 2—Fitchburg, 2—Newburyport, 6—Somerville, 8—Fall River, 21—Haverhill, 8—Holyoke, 5. Total, 361.

Prevalent Diseases.—Cholera infantum, 92—consumption, 39—scarlet fever, 17—typhoid fever, 16—dysentery and diarrhœa 12.

GEORGE DERBY, M.D.,
Secretary of the State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Sept. 20th, 155. Males, 76; females, 79. Accident, 7—apoplexy, 2—inflammation of the bowels, 2—disease of the bowels, 2—inflammation of the brain, 1—congestion of the brain, 1—disease of the brain, 7—cancer, 1—cholera infantum, 23—cholera morbus, 1—consumption, 16—convulsions, 4—debility, 6—diarrhœa, 5—dropsy of the brain, 1—drowned, 1—dysentery, 1—diphtheria, 2—scarlet fever, 8—typhoid fever, 14—disease of the heart, 2—intemperance, 2—disease of the kidneys, 1—disease of the liver, 3—congestion of lungs, 2—inflammation of the lungs, 4—lead poisoning, 1—marasmus, 7—noma, 1—old age, 2—paralysis, 3—premature birth, 7—pyæmia, 1—puerperal disease, 1—rheumatism, 1—scrofula, 1—tabes mesenterica, 2—teething, 3—whooping cough, 1—unknown, 5.

Under 5 years of age, 79—between 5 and 20 years, 15—between 20 and 40 years, 29—between 40 and 60 years, 14—over 60 years, 18. Born in the United States, 112—Ireland, 25—other places, 18.